

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/570,046
Source: 1 FWP
Date Processed by STIC: 3/8/06

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/570,046

CRF Edit Date: 3/13/06
Edited by: ME

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

✓
___ Other: deleted multiple <1107's
Seq 1,3 - corrected amino acid numbering



IFWP

RAW SEQUENCE LISTING

DATE: 03/13/2006

PATENT APPLICATION: US/10/570,046

TIME: 12:46:04

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

```

4 <110> APPLICANT: NAKAMURA, Toshikazu
5     YOSHIDA, Saho
6     MATSUMOTO, Kunio
7     ITAMI, Satoshi
8     YOSHIKAWA, Kunihiro
W--> 9 <120> TITLE OF INVENTION: SKIN ULCER PREVENTIVE CURATIVE AGENT CONTAINING HUMAN
RECOMBINANT HGF
W--> 10 <130> FILE REFERENCE: K12F1393(US)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/570,046
C--> 11 <141> CURRENT FILING DATE: 2006-03-01
W--> 11 <160> NUMBER OF SEQ ID: 3
W--> 12 <210> SEQ ID NO: 1
13 <211> LENGTH: 723
14 <212> TYPE: PRT
15 <213> ORGANISM: Homo sapiens
W--> 16 <400> SEQUENCE: 1
17 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
18 1 5 10 15
19 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
20 20 25 30
21 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
22 35 40 45
23 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
24 50 55 60
25 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
26 65 70 75 80
27 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
28 85 90 95
29 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
30 100 105 110
31 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
32 115 120 125
33 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
34 130 135 140
35 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
36 145 150 155 160
37 Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr Cys Arg Asn Pro Arg
38 165 170 175
39 Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser Asn Pro Glu Val Arg
40 180 185 190
41 Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
42 195 200 205
43 Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
44 210 215 220

```

RAW SEQUENCE LISTING

DATE: 03/13/2006

PATENT APPLICATION: US/10/570,046

TIME: 12:46:04

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

```

45 Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
46 225                230                235                240
47 Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
48                245                250                255
49 Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
50                260                265                270
51 Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
52                275                280                285
53 Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
54                290                295                300
55 Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro
56 305                310                315                320
57 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro
58                325                330                335
59 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro
60                340                345                350
61 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg
62                355                360                365
63 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln
64                370                375                380
65 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln
66 385                390                395                400
67 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp
68                405                410                415
69 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu
70                420                425                430
71 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr
72                435                440                445
73 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys
74                450                455                460
75 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile
76 465                470                475                480
77 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr
78                485                490                495
79 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His
80                500                505                510
81 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg
82                515                520                525
83 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly
84                530                535                540
85 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu
86 545                550                555                560
87 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu
88                565                570                575
89 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile
90                580                585                590
91 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser
92                595                600                605
93 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu

```

RAW SEQUENCE LISTING

DATE: 03/13/2006

PATENT APPLICATION: US/10/570,046

TIME: 12:46:04

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

```

94      610      615      620
95 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His
96 625      630      635      640
97 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala
98      645      650      655
99 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu
100      660      665      670
101 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro
102      675      680      685
103 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val
104      690      695      700
105 Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr Lys Val
106 705      710      715      720
107 Pro Gln Ser

```

109 <210> SEQ ID NO: 2

110 <211> LENGTH: 2172

111 <212> TYPE: DNA

112 <213> ORGANISM: Homo sapiens

W--> 113 <400> SEQUENCE: 2

```

114 atgtgggtga ccaaactcct gccagccctg ctgctgcagc atgtcctcct gcatctcctc 60
115 ctgctcccca tcgccatccc ctatgcagag ggacaaagga aaagaagaaa tacaattcat 120
116 gaattcaaaa aatcagcaaa gactacccta atcaaaatag atccagcact gaagataaaa 180
117 accaaaaaag tgaatactgc agaccaatgt gctaatagat gtactaggaa taaaggactt 240
118 ccattcactt gcaaggcttt tgtttttgat aaagcaagaa aacaatgcct ctggttcccc 300
119 ttcaatagca tgtcaagtgg agtgaaaaaa gaatttgccc atgaatttga cctctatgaa 360
120 aacaaagact acattagaaa ctgcatcatt ggtaaaggac gcagctacaa gggaacagta 420
121 tctatcacta agagtggcat caaatgtcag cctggaggtt ccattgatacc acacgaacac 480
122 agctatcggt gtaaagacct acaggaaaac tactgtcgaa atcctcgagg ggaagaaggg 540
123 ggaccctggt gtttcacaag caatccagag gtacgctacg aagtctgtga cattcctcag 600
124 tgttcagaag ttgaatgcat gacctgcaat ggggagaggt atcgaggtct catggatcat 660
125 acagaatcag gcaagatttg tcagcgctgg gatcatcaga caccacaccg gcacaaattc 720
126 ttgcctgaaa gatatcccgga caagggtttt gatgataatt attgccgcaa tcccgatggc 780
127 cagccgaggg catggtgcta tactcttgac cctcacacce gctgggagta ctgtgcaatt 840
128 aaaacatgcg ctgacaatac tatgaatgac actgatgttc ctttggaac aactgaatgc 900
129 atccaaggtc aaggagaagg ctacaggggc actgtcaata ccatttggaa tgggaattcca 960
130 tgtcagcggt gggatttctc gtatcctcac gagcatgaca tgactcctga aaatttcaag 1020
131 tgcaaggacc tacgagaaaa ttactgccga aatccagatg ggtctgaatc accctgggtg 1080
132 tttaccactg atccaaacat ccgagttggc tactgctccc aaattccaaa ctgtgatatg 1140
133 tcacatggac aagattgtta tcgtgggaat ggcaaaaatt atatgggcaa cttatcccaa 1200
134 acaagatctg gactaacatg ttcaatgtgg gacaagaaca tgggaagactt acatcgtcat 1260
135 atcttctggg aaccagatgc aagtaagctg aatgagaatt actgccgaaa tccagatgat 1320
136 gatgctcatg gacctgggtg ctacacggga aatccactca ttcttgagg tttattgcct 1380
137 atttctcggt gtgaagggtg taccacacct acaatagtca atttagacca tcccgtaata 1440
138 tcttgtgcc aacgaaaca attgcgagtt gtaaatggga ttccaacacg aacaaacata 1500
139 ggatggatgg ttagtttgag atacagaaat aaacatatct gcggaggatc attgataaag 1560
140 gagagttggg ttcttactgc acgacagtgt ttcccttctc gagacttgaa agattatgaa 1620
141 gcttggcttg gaattcatga tgtccacgga agaggagatg agaaatgcaa acaggttctc 1680
142 aatgtttccc agctgggtata tggccctgaa ggatcagatc tggttttaat gaagcttgcc 1740
143 aggcctgctg tcttgatga ttttgtagt acgattgatt tacctaatta tggatgcaca 1800

```

RAW SEQUENCE LISTING

DATE: 03/13/2006

PATENT APPLICATION: US/10/570,046

TIME: 12:46:04

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

```

144 attcctgaaa agaccagttg cagtgtttat ggctggggct acactggatt gatcaactat 1860
145 gatggcctat tacgagtggc acatctctat ataatgggaa atgagaaatg cagccagcat 1920
146 catcgagggg aggtgactct gaatgagtct gaaatatgtg ctggggctga aaagattgga 1980
147 tcaggacccat gtgaggggga ttatggtggc ccacttgttt gtgagcaaca taaaatgaga 2040
148 atggttcttg gtgtcattgt tcctggtcgt ggatgtgcca ttccaaatcg tcctggtatt 2100
149 tttgtccgag tagcatatta tgcaaaatgg atacacaaaa ttattttaac atataaggta 2160
150 ccacagtcac ag 2172

```

152 <210> SEQ ID NO: 3

153 <211> LENGTH: 728

154 <212> TYPE: PRT

155 <213> ORGANISM: Homo sapiens

W--> 156 <400> SEQUENCE: 3

```

157 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
158 1 5 10 15
159 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
160 20 25 30
161 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
162 35 40 45
163 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
164 50 55 60
165 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
166 65 70 75 80
167 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
168 85 90 95
169 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
170 100 105 110
171 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
172 115 120 125
173 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
174 130 135 140
175 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
176 145 150 155 160
177 Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr
178 165 170 175
179 Cys Arg Asn Pro Arg Gly Glu Glu Gly Gly Pro Trp Cys Phe Thr Ser
180 180 185 190
181 Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu
182 195 200 205
183 Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp
184 210 215 220
185 His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro
186 225 230 235 240
187 His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp
188 245 250 255
189 Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr
190 260 265 270
191 Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys
192 275 280 285
193 Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/570,046

DATE: 03/13/2006

TIME: 12:46:04

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

```

194      290      295      300
195 Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile
196 305      310      315      320
197 Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu
198      325      330      335
199 His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn
200      340      345      350
201 Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr
202      355      360      365
203 Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp
204      370      375      380
205 Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met
206 385      390      395      400
207 Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp
208      405      410      415
209 Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala
210      420      425      430
211 Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Ala His
212      435      440      445
213 Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys
214      450      455      460
215 Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu
216 465      470      475      480
217 Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val
218      485      490      495
219 Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg
220      500      505      510
221 Tyr Arg Asn Lys His Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp
222      515      520      525
223 Val Leu Thr Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr
224      530      535      540
225 Glu Ala Trp Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys
226 545      550      555      560
227 Cys Lys Gln Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly
228      565      570      575
229 Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp
230      580      585      590
231 Phe Val Ser Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu
232      595      600      605
233 Lys Thr Ser Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn
234      610      615      620
235 Tyr Asp Gly Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu
236 625      630      635      640
237 Lys Cys Ser Gln His His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu
238      645      650      655
239 Ile Cys Ala Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp
240      660      665      670
241 Tyr Gly Gly Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu
242      675      680      685

```

VERIFICATION SUMMARY

DATE: 03/13/2006

PATENT APPLICATION: US/10/570,046

TIME: 12:46:05

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\03132006\J570046.raw

L:9 M:283 W: Missing Blank Line separator, <120> field identifier
L:10 M:283 W: Missing Blank Line separator, <130> field identifier
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:11 M:283 W: Missing Blank Line separator, <160> field identifier
L:12 M:283 W: Missing Blank Line separator, <210> field identifier
L:16 M:283 W: Missing Blank Line separator, <400> field identifier
L:113 M:283 W: Missing Blank Line separator, <400> field identifier
L:156 M:283 W: Missing Blank Line separator, <400> field identifier

Raw Sequence Listing before editing (for reference only)



IFWP

RAW SEQUENCE LISTING

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:02

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

delete extra <110>'s slow only once

4 <110> APPLICANT: NAKAMURA, Toshikazu
W--> 5 <110> APPLICANT: YOSHIDA, Saho
W--> 6 <110> APPLICANT: MATSUMOTO, Kunio
W--> 7 <110> APPLICANT: ITAMI, Satoshi
W--> 8 <110> APPLICANT: YOSHIKAWA, Kunihiro
W--> 9 <120> TITLE OF INVENTION: SKIN ULCER PREVENTIVE CURATIVE AGENT CONTAINING HUMAN RECOMBINANT HGF
W--> 10 <130> FILE REFERENCE: K12F1393(US)
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/570,046
C--> 11 <141> CURRENT FILING DATE: 2006-03-01
W--> 11 <160> NUMBER OF SEQ ID: 3

ERRORED SEQUENCES

W--> 12 <210> SEQ ID NO: 1
13 <211> LENGTH: 723
14 <212> TYPE: PRT
15 <213> ORGANISM: Homo sapiens
W--> 16 <400> SEQUENCE: 1

P3

17	Met	Trp	Val	Thr	Lys	Leu	Leu	Pro	Ala	Leu	Leu	Gln	His	Val	Leu
18	1				5					10				15	
19	Leu	His	Leu	Leu	Leu	Pro	Ile	Ala	Ile	Pro	Tyr	Ala	Glu	Gly	Gln
20				20				25					30		
21	Arg	Lys	Arg	Arg	Asn	Thr	Ile	His	Glu	Phe	Lys	Lys	Ser	Ala	Lys
22				35				40					45		
23	Thr	Leu	Ile	Lys	Ile	Asp	Pro	Ala	Leu	Lys	Ile	Lys	Thr	Lys	Val
24		50						55				60			
25	Asn	Thr	Ala	Asp	Gln	Cys	Ala	Asn	Arg	Cys	Thr	Arg	Asn	Lys	Gly
26	65					70				75				80	
27	Pro	Phe	Thr	Cys	Lys	Ala	Phe	Val	Phe	Asp	Lys	Ala	Arg	Lys	Gln
28					85					90				95	
29	Leu	Trp	Phe	Pro	Phe	Asn	Ser	Met	Ser	Ser	Gly	Val	Lys	Lys	Glu
30				100					105				110		
31	Gly	His	Glu	Phe	Asp	Leu	Tyr	Glu	Asn	Lys	Asp	Tyr	Ile	Arg	Asn
32			115					120					125		
33	Ile	Ile	Gly	Lys	Gly	Arg	Ser	Tyr	Lys	Gly	Thr	Val	Ser	Ile	Thr
34		130						135				140			
35	Ser	Gly	Ile	Lys	Cys	Gln	Pro	Trp	Ser	Ser	Met	Ile	Pro	His	Glu
36	145					150				155				160	
37	Ser	Tyr	Arg	Gly	Lys	Asp	Leu	Gln	Glu	Asn	Tyr	Cys	Arg	Asn	Pro
38					165					170				175	
39	Gly	Glu	Glu	Gly	Gly	Pro	Trp	Cys	Phe	Thr	Ser	Asn	Pro	Glu	Val
40					180				185					190	

**Does Not Comply
Corrected Diskette Needed**

RAW SEQUENCE LISTING

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:02

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

```

41 Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu Val Glu Cys Met Thr
42      195                200                205
43 Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp His Thr Glu Ser Gly
44      210                215                220
45 Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro His Arg His Lys Phe
46 225                230                235                240
47 Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp Asp Asn Tyr Cys Arg
48      245                250                255
49 Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr Thr Leu Asp Pro His
50      260                265                270
51 Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys Ala Asp Asn Thr Met
52      275                280                285
53 Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu Cys Ile Gln Gly Gln
54      290                295                300
55 Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile Trp Asn Gly Ile Pro
56 305                310                315                320
57 Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu His Asp Met Thr Pro
58      325                330                335
59 Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn Tyr Cys Arg Asn Pro
60      340                345                350
61 Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr Asp Pro Asn Ile Arg
62      355                360                365
63 Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp Met Ser His Gly Gln
64      370                375                380
65 Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met Gly Asn Leu Ser Gln
66 385                390                395                400
67 Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp Lys Asn Met Glu Asp
68      405                410                415
69 Leu His Arg His Ile Phe Trp Glu Pro Asp Ala Ser Lys Leu Asn Glu
70      420                425                430
71 Asn Tyr Cys Arg Asn Pro Asp Asp Asp Ala His Gly Pro Trp Cys Tyr
72      435                440                445
73 Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys Pro Ile Ser Arg Cys
74      450                455                460
75 Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu Asp His Pro Val Ile
76 465                470                475                480
77 Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val Asn Gly Ile Pro Thr
78      485                490                495
79 Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg Tyr Arg Asn Lys His
80      500                505                510
81 Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp Val Leu Thr Ala Arg
82      515                520                525
83 Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr Glu Ala Trp Leu Gly
84      530                535                540
85 Ile His Asp Val His Gly Arg Gly Asp Glu Lys Cys Lys Gln Val Leu
86 545                550                555                560
87 Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly Ser Asp Leu Val Leu
88      565                570                575
89 Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp Phe Val Ser Thr Ile

```

RAW SEQUENCE LISTING

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:02

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

```

90          580          585          590
91 Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu Lys Thr Ser Cys Ser
92          595          600          605
93 Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn Tyr Asp Gly Leu Leu
94          610          615          620
95 Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu Lys Cys Ser Gln His
96 625          630          635          640
97 His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu Ile Cys Ala Gly Ala
98          645          650          655
99 Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp Tyr Gly Gly Pro Leu
100          660          665          670
101 Val Cys Glu Gln His Lys Met Arg Met Val Leu Gly Val Ile Val Pro
E--> 102          675          680          685
103 Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly Ile Phe Val Arg Val
104          690          695          700
105 Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile Leu Thr Tyr Lys Val
106 705          710          715          720
107 Pro Gln Ser
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 728
154 <212> TYPE: PRT
155 <213> ORGANISM: Homo sapiens
W--> 156 <400> SEQUENCE: 3
157 Met Trp Val Thr Lys Leu Leu Pro Ala Leu Leu Leu Gln His Val Leu
158 1          5          10          15
159 Leu His Leu Leu Leu Leu Pro Ile Ala Ile Pro Tyr Ala Glu Gly Gln
160          20          25          30
161 Arg Lys Arg Arg Asn Thr Ile His Glu Phe Lys Lys Ser Ala Lys Thr
162          35          40          45
163 Thr Leu Ile Lys Ile Asp Pro Ala Leu Lys Ile Lys Thr Lys Lys Val
164          50          55          60
165 Asn Thr Ala Asp Gln Cys Ala Asn Arg Cys Thr Arg Asn Lys Gly Leu
166 65          70          75          80
167 Pro Phe Thr Cys Lys Ala Phe Val Phe Asp Lys Ala Arg Lys Gln Cys
168          85          90          95
169 Leu Trp Phe Pro Phe Asn Ser Met Ser Ser Gly Val Lys Lys Glu Phe
170          100          105          110
171 Gly His Glu Phe Asp Leu Tyr Glu Asn Lys Asp Tyr Ile Arg Asn Cys
172          115          120          125
173 Ile Ile Gly Lys Gly Arg Ser Tyr Lys Gly Thr Val Ser Ile Thr Lys
174          130          135          140
175 Ser Gly Ile Lys Cys Gln Pro Trp Ser Ser Met Ile Pro His Glu His
176 145          150          155          160
177 Ser Phe Leu Pro Ser Ser Tyr Arg Gly Lys Asp Leu Gln Glu Asn Tyr
178          165          170          175
179 Cys Arg Asn Pro Arg Gly Glu Glu Gly Pro Trp Cys Phe Thr Ser
180          180          185          190
181 Asn Pro Glu Val Arg Tyr Glu Val Cys Asp Ile Pro Gln Cys Ser Glu
182          195          200          205

```

RAW SEQUENCE LISTING

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:02

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

```

183 Val Glu Cys Met Thr Cys Asn Gly Glu Ser Tyr Arg Gly Leu Met Asp
184      210                      215                      220
185 His Thr Glu Ser Gly Lys Ile Cys Gln Arg Trp Asp His Gln Thr Pro
186 225                      230                      235                      240
187 His Arg His Lys Phe Leu Pro Glu Arg Tyr Pro Asp Lys Gly Phe Asp
188                      245                      250                      255
189 Asp Asn Tyr Cys Arg Asn Pro Asp Gly Gln Pro Arg Pro Trp Cys Tyr
190                      260                      265                      270
191 Thr Leu Asp Pro His Thr Arg Trp Glu Tyr Cys Ala Ile Lys Thr Cys
192                      275                      280                      285
193 Ala Asp Asn Thr Met Asn Asp Thr Asp Val Pro Leu Glu Thr Thr Glu
194      290                      295                      300
195 Cys Ile Gln Gly Gln Gly Glu Gly Tyr Arg Gly Thr Val Asn Thr Ile
196 305                      310                      315                      320
197 Trp Asn Gly Ile Pro Cys Gln Arg Trp Asp Ser Gln Tyr Pro His Glu
198                      325                      330                      335
199 His Asp Met Thr Pro Glu Asn Phe Lys Cys Lys Asp Leu Arg Glu Asn
200                      340                      345                      350
201 Tyr Cys Arg Asn Pro Asp Gly Ser Glu Ser Pro Trp Cys Phe Thr Thr
202                      355                      360                      365
203 Asp Pro Asn Ile Arg Val Gly Tyr Cys Ser Gln Ile Pro Asn Cys Asp
204      370                      375                      380
205 Met Ser His Gly Gln Asp Cys Tyr Arg Gly Asn Gly Lys Asn Tyr Met
206 385                      390                      395                      400
207 Gly Asn Leu Ser Gln Thr Arg Ser Gly Leu Thr Cys Ser Met Trp Asp
208                      405                      410                      415
209 Lys Asn Met Glu Asp Leu His Arg His Ile Phe Trp Glu Pro Asp Ala
210                      420                      425                      430
211 Ser Lys Leu Asn Glu Asn Tyr Cys Arg Asn Pro Asp Asp Ala His
212                      435                      440                      445
213 Gly Pro Trp Cys Tyr Thr Gly Asn Pro Leu Ile Pro Trp Asp Tyr Cys
214      450                      455                      460
215 Pro Ile Ser Arg Cys Glu Gly Asp Thr Thr Pro Thr Ile Val Asn Leu
216 465                      470                      475                      480
217 Asp His Pro Val Ile Ser Cys Ala Lys Thr Lys Gln Leu Arg Val Val
218                      485                      490                      495
219 Asn Gly Ile Pro Thr Arg Thr Asn Ile Gly Trp Met Val Ser Leu Arg
220                      500                      505                      510
221 Tyr Arg Asn Lys His Ile Cys Gly Gly Ser Leu Ile Lys Glu Ser Trp
222                      515                      520                      525
223 Val Leu Thr Ala Arg Gln Cys Phe Pro Ser Arg Asp Leu Lys Asp Tyr
224      530                      535                      540
225 Glu Ala Trp Leu Gly Ile His Asp Val His Gly Arg Gly Asp Glu Lys
226 545                      550                      555                      560
227 Cys Lys Gln Val Leu Asn Val Ser Gln Leu Val Tyr Gly Pro Glu Gly
228                      565                      570                      575
229 Ser Asp Leu Val Leu Met Lys Leu Ala Arg Pro Ala Val Leu Asp Asp
230                      580                      585                      590
231 Phe Val Ser Thr Ile Asp Leu Pro Asn Tyr Gly Cys Thr Ile Pro Glu

```

RAW SEQUENCE LISTING

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:02

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

```

232          595          600          605
233 Lys Thr Ser Cys Ser Val Tyr Gly Trp Gly Tyr Thr Gly Leu Ile Asn
234          610          615          620
235 Tyr Asp Gly Leu Leu Arg Val Ala His Leu Tyr Ile Met Gly Asn Glu
236 625          630          635          640
237 Lys Cys Ser Gln His His Arg Gly Lys Val Thr Leu Asn Glu Ser Glu
238          645          650          655
239 Ile Cys Ala Gly Ala Glu Lys Ile Gly Ser Gly Pro Cys Glu Gly Asp
240          660          665          670
241 Tyr Gly Gly Pro Leu Val Cys Glu Gln His Lys Met Arg Met Val Leu
E--> 242          675          680          685
243 Gly Val Ile Val Pro Gly Arg Gly Cys Ala Ile Pro Asn Arg Pro Gly
244          690          695          700
245 Ile Phe Val Arg Val Ala Tyr Tyr Ala Lys Trp Ile His Lys Ile Ile
246 705          710          715          720
247 Leu Thr Tyr Lys Val Pro Gln Ser
248          725

```

VERIFICATION SUMMARY

DATE: 03/08/2006

PATENT APPLICATION: US/10/570,046

TIME: 13:20:03

Input Set : A:\PTO.KD.txt

Output Set: N:\CRF4\03072006\J570046.raw

L:5 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:6 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:7 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:8 M:280 W: Numeric Identifier already exists, <110> found multiple times
L:9 M:283 W: Missing Blank Line separator, <120> field identifier
L:10 M:283 W: Missing Blank Line separator, <130> field identifier
L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:11 M:283 W: Missing Blank Line separator, <160> field identifier
L:12 M:283 W: Missing Blank Line separator, <210> field identifier
L:16 M:283 W: Missing Blank Line separator, <400> field identifier
L:102 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1
L:113 M:283 W: Missing Blank Line separator, <400> field identifier
L:156 M:283 W: Missing Blank Line separator, <400> field identifier
L:242 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:3